Claims

- 1. Radioimmunoconjugate comprising an alpha-emitting radionuclide bound to a monoclonal antibody, characterised in that said monoclonal antibody is C595.
- 2. Radioimmunoconjugate according to claim 1, characterised in that said alpha-emitting radionuclide is selected from the group comprising: Tb-149, At-211, Bi-212, Bi-213 and Ac-225.
 - 3. Radioimmunoconjugate according to claim 2, characterised in that said alpha-emitting radionuclide is Bi-213 or Tb-149.
- 4. Radioimmunoconjugate according to claim 2, characterised in that said alpha-emitting radionuclide is Ac-225.
 - 5. Radioimmunoconjugate according to any one of the preceding claims, characterised in that said alpha-emitting radionuclide is bound to said monoclonal antibody by a chelating agent.
- 6. Radioimmunoconjugate according to claim 5, characterised in that said chelating agent is DOTA, cDTPA, DTPA-CHX-A or TETA.
 - 7. Method for manufacturing a radioimmunoconjugate, wherein an alphaemitting radioisotope is bound to a monoclonal antibody, characterized in that said monoclonal antibody is C595.
- 8. Radiopharmaceutical comprising a radioimmunoconjugate according to any one of claims 1 to 6.
 - 9. Radiopharmaceutical according to claim 8, comprising a pharmaceutically acceptable carrier and/or diluent and/or excipient.
 - 10. Use of a radioconjugate according to any one of claims 1 to 6 for the manufacture of a radiopharmaceutical.
- 25 11. Use of a radioconjugate according to any one of claims 1 to 6 for the manufacture of a radiopharmaceutical for cancer therapy.

- 12. Use of a radioconjugate according to any one of claims 1 to 6 for the manufacture of a radiopharmaceutical for adjunctive cancer therapy, in particular for early stage metastatic cancer or cancer at the minimum residual disease stage.
- 5 13.Use of a radioconjugate according to any one of claims 1 to 6 for the manufacture of a radiopharmaceutical for the treatment of breast, prostate, ovarian and/or pancreatic cancer.
 - 14. Method of treatment of a mammal affected by a cancer which comprises administering to said mammal a therapeutically effective amount of the radiopharmaceutical according to claim 8 or 9.

10

- 15. Method according to claim 14, wherein said cancer is one of breast, prostate, ovarian and pancreatic cancer.
- 16. Method according to claim 14 or 15, wherein said radiopharmaceutical is administered as an adjunctive therapeutic treatment.
- 15 17. Method according to claim 14, 15 or 16, wherein said radiopharmaceutical is administered directly after removal of a primary tumour.
 - 18. Method according to claim 14, 15 or 16, wherein said radiopharmaceutical is administered upon detection of regions of tumour cells at the preangiogenic stage.
- 19. Method according to claim 14, 15 or 16, wherein said radiopharmaceutical is administered upon diagnosis of high risk factors in said mammal.
 - 20. Method according to claim 14, 15 or 16, wherein said radiopharmaceutical is administered upon detection of certain cancer proteins in serum.